

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Method for carrying out in continuous, under so-called pseudo-isothermal conditions and in a predetermined reaction environment, ~~such as a catalytic bed,~~ a selected chemical reaction, comprising the steps of ~~providing in said reaction environment at least one heat exchanger fed with a first flow of a heat exchange operating fluid at a respective predetermined inlet temperature,~~ feeding a first flow of a heat exchange operating fluid at a respective predetermined inlet temperature in at least one tubular heat exchanger provided in said reaction environment said fluid passing through said at least one heat exchanger according to a respective inlet/outlet path, ~~which, the method is characterized by~~ further comprising feeding into said at least one heat exchanger and at one or more intermediate positions of said path, a second flow of operating fluid having a respective predetermined inlet temperature.

2. (Currently Amended) Heat exchanger ~~for the method according to claim 1,~~ comprising two wide walls (2, 3; 21, 22), a chamber (5, 26) defined between said walls (2, 3; 21, 22) ~~and intended for being passed through by a heat exchange operating fluid,~~ a fluid inlet connector (6, 24) and a fluid outlet connector (7, 25) in and from said chamber (5, 26) respectively, at least a distributor, (8, 9; 30, 31) of operating fluid, fixed to a wide surface of at

least one of said wide walls (2, 3; 21, 22) at a predetermined distance from said connectors (6, 7; 24, 25) and in fluid communication with said chamber (5, 26), at least a duct (10, 28-29) for feeding said operating fluid, in communication with said at least one distributor (8, 9; 30, 31).

3. (Currently Amended) Heat exchanger according to claim 2, ~~characterized in that~~ wherein said distributor (8, 9; 30, 31) comprises a plurality of through holes (13, 32) formed in said wall (3, 22) and a casing (14), fixed externally to said wall (3, 22) to cover said holes (13, 32) and defining with it a fluid distribution chamber (15).

4. (Currently Amended) Heat exchanger according to claim 3, ~~characterized in that~~ wherein said through holes (13, 32) are arranged according to at least a rectilinear alignment.

5. (Currently Amended) Heat exchanger according to claim 2, ~~characterized in that~~ wherein said feeding duct (10) is associated externally to said exchanger (1) and is in fluid communication with said at least one distributor (8, 9) through a respective connector (11, 12).

6. (Currently Amended) Heat exchanger according to claim 2, ~~characterized in that~~ wherein said feeding duct (29) is formed between said large walls (21, 22), separated in a liquid-tight way from said chamber (26) and is in fluid communication with said at least one distributor (30, 31) through at least a through hole (33), formed in the feeding duct (29).

Amendment Under 37 C.F.R. § 1.111
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